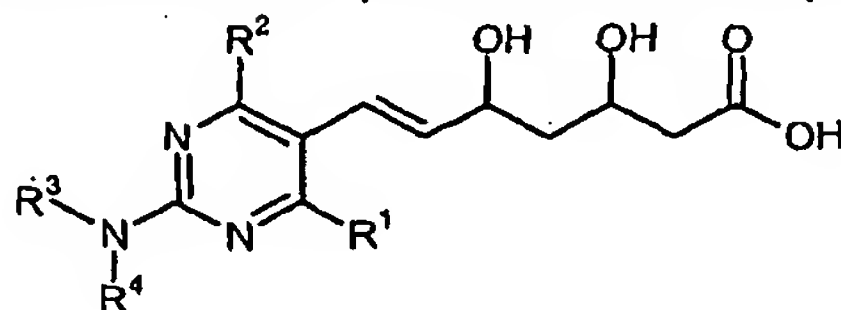


CLAIMS

1. A process for the preparation of a compound of formula (7):



5

wherein

R^1 represents an alkyl group, such as a C_{1-6} alkyl group, and preferably an isopropyl group;

R^2 represents an aryl group, preferably a 4-fluorophenyl group;

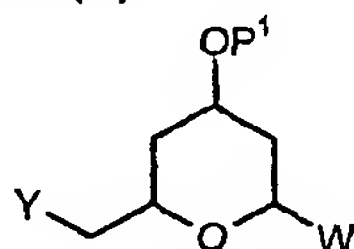
10

R^3 represents hydrogen, a protecting group or an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group; and

R^4 represents hydrogen, a protecting group or a SO_2R^5 group where R^5 is an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group,

which comprises

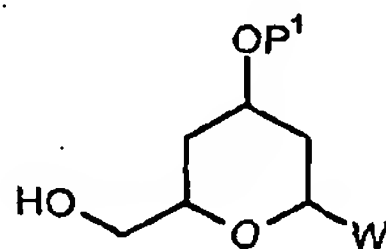
- a) hydroxylating a compound of formula (1):



15

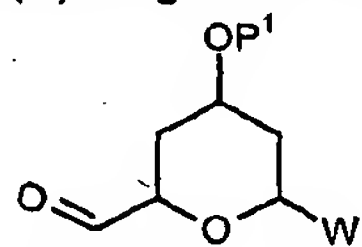
wherein Y represents a halo group, preferably Cl or Br; P^1 represents hydrogen or a protecting group, and W represents $=O$ or $-OP^2$, in which P^2 represents hydrogen or a protecting group,

to give a compound of formula (2):

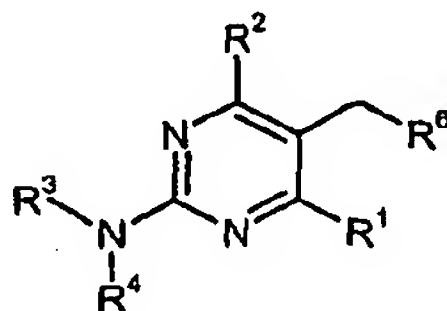


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- b) oxidising the compound of formula (2) to give a compound of formula (3):



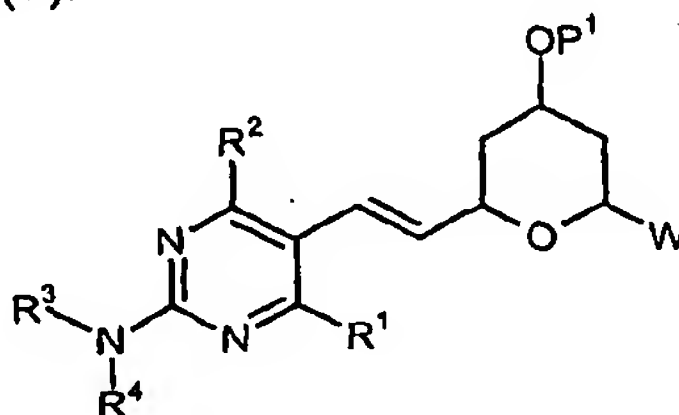
- c) coupling the compound of formula (3) with a compound of formula (4):



25

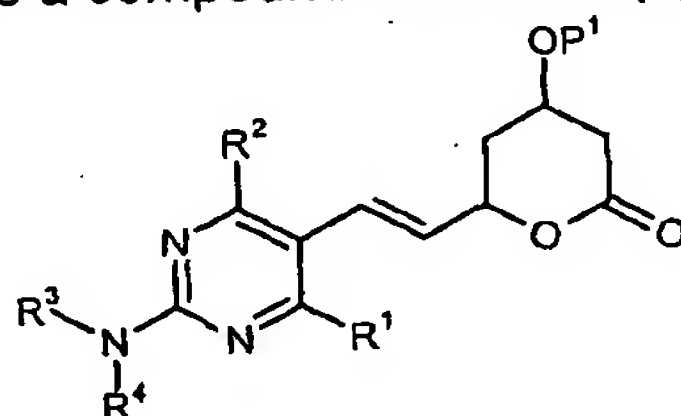
wherein R^3 represents a protecting group or an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group; R^4 represents a protecting group or a SO_2R^5 group where R^5 is an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group; and R^6 represents $(PR^7R^8)^+X^-$ or $P(=O)R^7R^8$ in which X is an anion and R^7 and R^8 each independently is an alkyl, aryl, alkoxy or aryloxy group, preferably a phenyl group,

to give a compound of formula (5):



wherein R^3 represents a protecting group or an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group; and R^4 represents a protecting group or a SO_2R^5 group where R^5 is an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group,

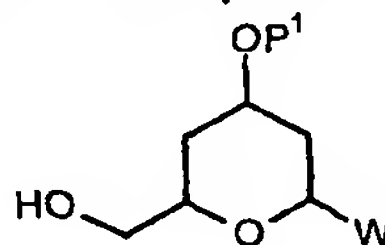
d) when W represents $-OP^2$, removing any P^2 protecting group and oxidising the compound of formula (5) to give a compound of formula (6):



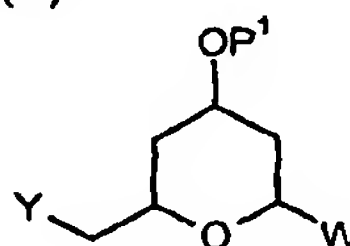
and

e) subjecting the compound of formula (5) when W represents $=O$, or compound of formula (6) to ring-opening, removal of any P^1 protecting groups, and optionally removing any additional protecting groups to give a compound of formula (7).

2. A process for the preparation of a compound of formula (2):

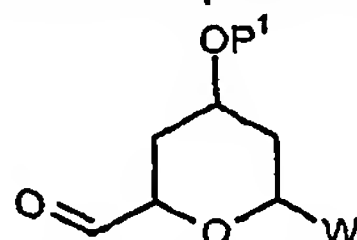


hydroxylating a compound of formula (1):

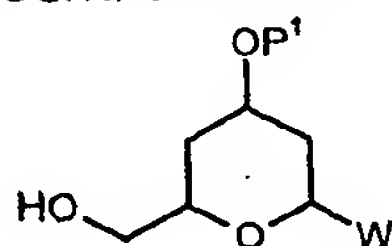


wherein Y represents a halo group, preferably Cl or Br; P¹ represents hydrogen or a protecting group, and W represents =O or -OP², in which P² represents hydrogen or a protecting group.

- 5 3. A process for the preparation of a compound of formula (3):

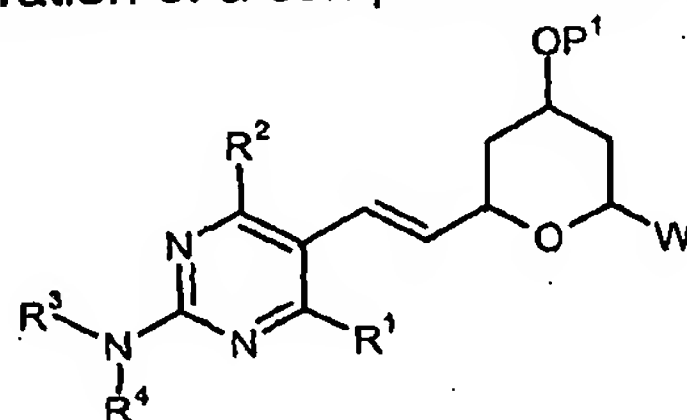


which comprises oxidation of a compound of formula (2):

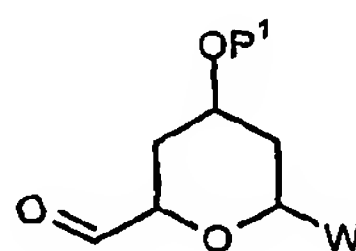


10 wherein P¹ represents hydrogen or a protecting group, and W represents =O or -OP², in which P² represents hydrogen or a protecting group.

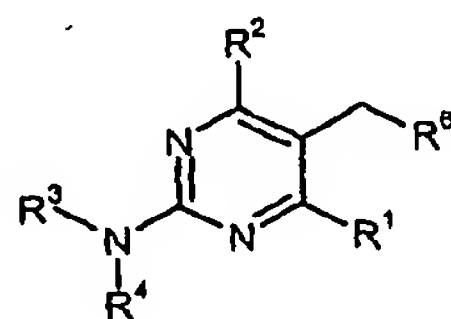
4. A process for the preparation of a compound of formula (5):



15 which comprises coupling the compound of formula (3):



with a compound of formula (4):



20 wherein

R¹ represents an alkyl group, such as a C₁₋₆ alkyl group, and preferably an isopropyl group;

R² represents an aryl group, preferably a 4-fluorophenyl group;

R³ represents a protecting group or an alkyl group, such as a C₁₋₆ alkyl group, and preferably a methyl group;

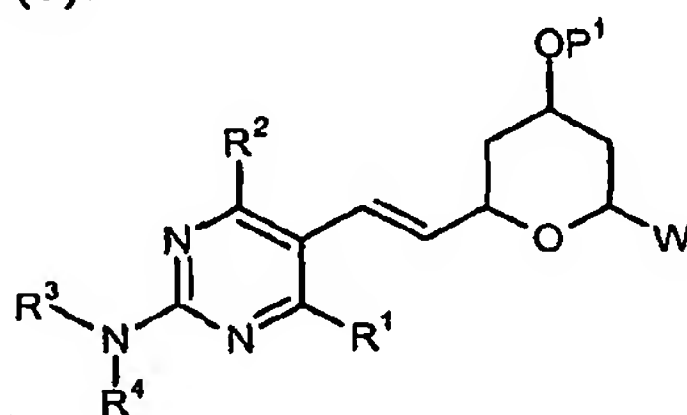
R^4 represents a protecting group or a SO_2R^5 group where R^5 is an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group; and

R^6 represents $(PR^7R^8)^+X^-$ or $P(=O)R^7R^8$ in which X is an anion and R^7 and R^8 each independently is an alkyl, aryl, alkoxy or aryloxy group, preferably a phenyl group,

P^2 represents hydrogen or a protecting group; and

W represents $=O$ or $-OP^2$, in which P^2 represents hydrogen or a protecting group.

5. A compound of formula (5):



wherein

R^1 represents an alkyl group, such as a C_{1-6} alkyl group, and preferably an isopropyl group;

R^2 represents an aryl group, preferably a 4-fluorophenyl group;

R^3 represents hydrogen, a protecting group or an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group;

R^4 represents a protecting group or a SO_2R^5 group where R^5 is an alkyl group, such as a C_{1-6} alkyl group, and preferably a methyl group;

P^1 represents hydrogen or a protecting group; and

W represents $=O$ or $-OP^2$, in which P^2 represents hydrogen or a protecting group.